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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,965	03/22/2004	Katsuya Watanabe	10407-82US (A3103MT-US1)	1679
570 7590 05/31/2007 AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			EXAMINER TRAN, THANG V	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/805,965

Applicant(s)

WATANABE ET AL.

Examiner

Thang V. Tran

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 8 and 10-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-33 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 11-19 is/are rejected.
- 7) ☒ Claim(s) 8, 10 and 20-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

An amendment dated 3/12/07 has been considered with the following results:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 and 11-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishizawa et al (US 2003/0095487).

Regarding claim 1, Nishizawa et al, according to Figs. 1, 4-7, discloses a method for recognizing at least three types of optical discs (see CD, DVD, extra high density shown in Figs. 1A-1C), which are associated with multiple different numerical apertures (0.45 for CD objective lens, 0.6 for DVD objective lens, and 0.7-0.85 for extra high density objective lens) and multiple different wavelengths (780nm for CD, 635nm for DVD, 400nm for extra high density disk), the method comprising the steps of: setting the numerical aperture (0.45) of focusing means (CD objective lens) equal to a first one of the multiple different numerical apertures (by using filter 51g), the focusing means being used to focus a light beam on a data storage layer of a given optical disc, the first numerical aperture (0.45) being smaller than any of the other numerical apertures (0.6-0.85); setting the wavelength of light beam equal to a wavelength for the CD (by using CPU 53 and SW1); and recognizing the type of the given optical disc by the first numerical aperture that has been selected in the step of setting the numerical aperture (see steps 14-19 in Fig. 6) by the set numerical aperture and wavelength.

Regarding claim 2, see the rejection applied to claim 1, and further see filter 51g, CPU 53 and SW1 as setting changing means; and circuits 59 and 61 as disk recognizing means, as further recited in this claim 2.

Regarding claim 3, see the rejection applied to claim 2, and further see lasers 51b, 51c, 52b and circuits 54-56 as light source means; lenses 51h, 52e as focusing means; and detectors 51j, 52g as detecting means, as further recited in this claim 3.

Regarding claims 11 and 13, see paragraphs 0073 and 0081.

Regarding claims 12 and 14, see paragraphs 0075 and 0082.

Regarding claim 15, see Fig. 4 which shows signal representing the detected portion of the reflected light includes at least one of a focus error signal, a tracking error signal, a signal representing the quantity of the reflected light and a read signal.

Regarding claim 16, see the rejection applied to claim 1, and it is further noticed that since the type disk (CD, DVD and extra high density disk) is recognized, the data storage layer thereof (see different data storage layer for each type of disk as shown in Fig. 1A-1C) is also distinguished accordingly.

Regarding claim 17, see the rejection applied to claim 2, and it is further noticed that since the type disk (CD, DVD and extra high density disk) is recognized, the data storage layer thereof (see different data storage layer for each type of disk as shown in Fig. 1A-1C) is also distinguished accordingly.

Regarding claim 18, see the rejection applied to claim 3, and it is further noticed that since the type disk (CD, DVD and extra high density disk) is recognized, the data storage layer

thereof (see different data storage layer for each type of disk as shown in Fig. 1A-1C) is also distinguished accordingly.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishizawa et al (US 2003/0095487) in view of Ra (US 5,671,203).

Nishizawa et al, according to Figs. 1, 4-7, discloses all of limitations of the instant claimed invention (see the rejection above) except for the use of counting means for counting the number of the data storage layers of the given optical disc. Ra, according to Figs. 2-4B, teaches the of counting means (see counter 21 in Fig. 2 and Fig. B) for counting the number of the data storage layers of a loaded optical disc for the purpose of determined whether the load disk is a single layer disk or multilayer disk. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the counter as taught by Ra into the apparatus of Nishizawa et al for counting the number of the data storage layers of the loaded optical disc in order to determine whether the load disk is a single layer disk or multilayer disk .

Allowable Subject Matter

5. Claims 8, 10 and 20-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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6. Claims 25-32 are allowable over the prior art of record.

7. Claims 8, 10 and 20-24 are allowable over the prior art of record for the because the prior art of record, viewed as closest prior art and considered alone or combination, fails to suggest or fairly teach an optical disc drive for at least three types of optical discs include light beam passage layers with multiple different thicknesses to pass the light beam, and the optical disc drive includes a combination of: spherical aberration correcting means for correcting a spherical aberration produced on the spot of the light beam that has been focused on the data storage layer of a given optical disc; and spherical aberration regulating means for setting the magnitude of correction to be made by the spherical aberration correcting means equal to a first correction value when the setting means sets the numerical aperture of the focusing means equal to the first numerical aperture, the first correction value being associated with the largest one of the multiple different thicknesses as recited in claim 8, or an optical disc drive for the at least three types of data storage layers are located at mutually different depths as measured from a principal surface of a given optical disc, and the optical disc drive includes: vertical position changing means for moving the focusing means perpendicularly to the data storage layers; and shifting means for getting the light beam focused on the deepest one of the data storage layers first, the second deepest one next, and so forth toward the surface of the given optical disc, by driving the vertical position changing means while a distinguishing means is distinguishing the given data storage layer as recited in claim 20. Claim 9 and 21-24 are allowable with their respective parent claim.

8. Claims 25-32 are allowable over the prior art of record for the same reasons previously given in claims 8 and 20 in the last Office action mailed 12/12/06.

Response to Arguments

9. Applicant's arguments with respect to claimed invention have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

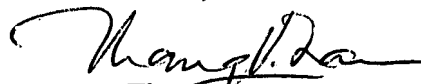
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang V. Tran whose telephone number is (571) 272-7595. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Hoa can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thang V. Tran
Primary Examiner
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